HOW MONTCLAIR PUBLIC SCHOOLS DEPLOYED 3D PRINTERS DISTRICT-WIDE

Montclair is a township in New Jersey just outside of New York City — but it's no "small town." The same goes for Montclair's public school district, which is made up of 11 individual K-12 schools supporting a whopping 7,000 students. The task of modernizing curriculum and introducing STEM learning initiatives can be a massive undertaking for a single school, but it can be even more challenging for an entire district.

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WE WANT KIDS TO BE
REGULAR PRODUCERS.
WE WANT THEM TO BE
INGENIOUS. WE WANT
THEM TO BE CREATIVE.
WE WANT THEM TO BE
PROBLEM SOLVERS.

3D printers are excellent tools for educators, and a single printer can have a massive impact on a small scale in a library or classroom. Some of Montclair's schools explored individual initiatives in the past, like building single makerspaces, but the district was interested in a more connected, soup-to-nuts solution that could facilitate STEM learning across the entire system.

In 2015, MakerBot and Montclair partnered to establish the first district-wide network of desktop 3D printers, in each school, from the elementary level all the way up to Montclair State University. Educators and administrators know this is no easy feat. Implementing a lot of specialized technology at once requires a lot of support, training, and accompanying curriculum to keep the printers from collecting dust. It's this very real need that led MakerBot to build the industry's first fully supported solutions for education — from offering educators easy and reliable printing and curriculum to offering administrators solutions for purchasing, deployment, and comprehensive tech support.

With 3D printers in over 5,000 schools across the US, administrators and educators rely on MakerBot, the industry's most complete 3D printing solution for education. Now, over two years later, MakerBot caught up with Montclair to learn more about the impact their 3D printers are having across the district.

"We brought in MakerBot to provide consistency and continuity for the program," began Dr. Joseph Putrino, Glenfield Middle School's principal. He continued to say that "reliability was obviously a big factor, we didn't want to bring something in that would fail – but we knew we'd be successful with MakerBot." Dr. Putrino raises the important points that are often overlooked before schools leap into 3D printing. Can a 2nd grader and a 10th grader use the same tools for different learning outcomes? How much maintenance do printers need? Are the 3D printers easy to set up?

More often than not, this burden is passed like a hot potato from the tech company to the school, leaving educators an immense amount of work to train themselves, author curriculum, and become experts in maintaining the tools. This is not the case with MakerBot, and not the case at Buzz Aldrin Middle School in Montclair where STEM coordinator Daniel Taylor proudly supports the district's printers and users across all eleven schools.

THE REASON WHY WE CONTINUE TO DO WHAT WE DO SUCCESSFULLY IS BECAUSE THE CUSTOMER SERVICE FROM MAKERBOT IS OUTSTANDING. WE GET THE PARTS WE NEED, WE GET THINGS FIXED, WE GET REPLACEMENTS AS SOON AS POSSIBLE.

"We're committed to making 3D printing a district wide initiative and are doing printing in grades 2 through 12 at all eleven schools," explained Taylor. To meet Montclair's wide need for 3D printing lesson plans, Taylor adds that ""We use MakerBot Thingiverse Education, with lessons that've been developed by educators – that's a great resource." MakerBot's Thingiverse Education portal is the internet's largest collection of teacher tested 3D printing lesson plans and the biggest community of 3D printing educators. Combined with the newly published MakerBot Educators Guidebook and regular training webinars, Montclair's educators have the resources they need to hit the ground running in any subject or grade level.

Montclair's students have the unique opportunity to experience 3D printing and 3D design from elementary school all the way through high school. This is a brand new paradigm in STEM learning that would not possible without the wide range of benefits that MakerBot content, community, support, and administrative solutions provide.
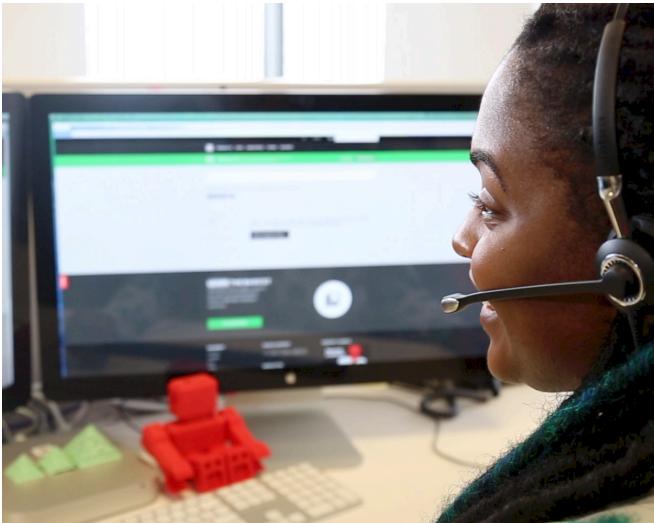
THIS IS WHAT WE MEAN WHEN WE TALK ABOUT 21ST CENTURY CAREERS. OUR STUDENTS ARE GRADUATING WITH REAL IDEAS OF HOW THEY CAN USE 3D PRINTING MOVING FORWARD.
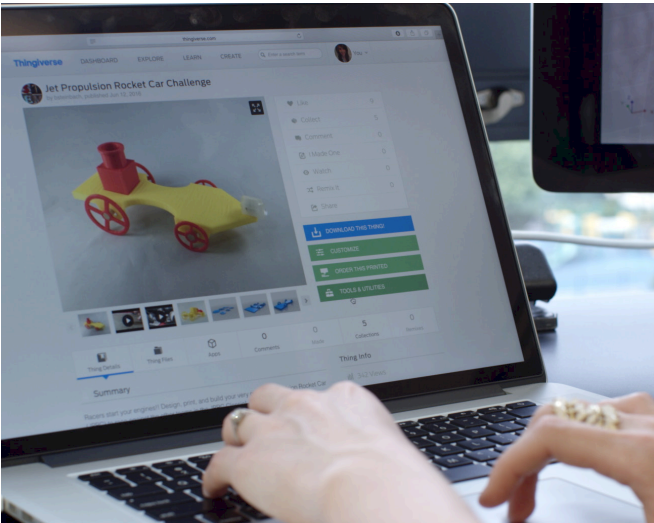
MAKERBOT SOLUTIONS FOR ADMINISTRATORS AND EDUCATORS

STREAMLINED PURCHASING AND DEPLOYMENT

INDUSTRY LEADING CUSTOMER SUPPORT

CLASSROOM READY 3D PRINTING CURRICULUM